

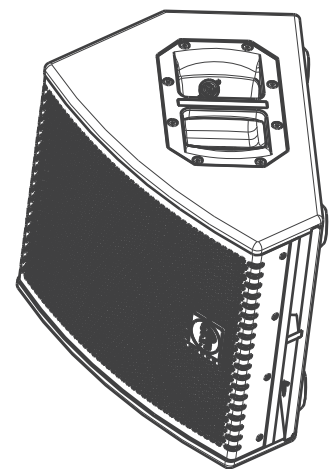
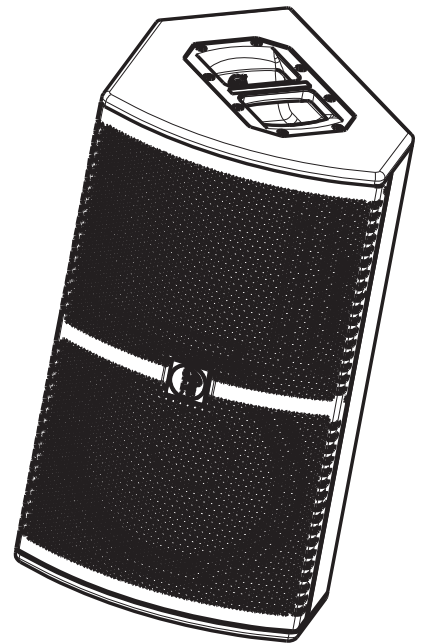


ESM Series User Guide

- **ESM26**



- **ESM12**



The future of sound. Made perfectly clear.

At KV2 Audio our vision is to constantly develop technologies that eliminate distortion and loss of information providing a true dynamic representation of the source.

Our aim is to create audio products that absorb you, place you within the performance and deliver a listening experience beyond expectation.

Contents

ESM26	3
Overview	3
Drawing	4
Specifications	5
 ESM12	 6
Overview	6
Drawing ESM12L	7
Drawing ESM12R	8
Specifications	9
 Accessories	 10
 Warranty	 11
 Service	 11

ESM26

Application:

- High quality floor monitoring applications
- Very low dimensions, SPL and high quality sound
- Ideal for TV studios and theaters



MODEL NUMBER:
ESM26

PRODUCT CODE:
KVV 987 263

ESM26

Description:

The ESM26 is a full-range low profile 2-way, passive 2x 6" monitoring solution. The ESM26 features a revolutionary passive delay line which dramatically reduces feedback and the same 1.75" NVPD compression driver as used in the EX series. Designed to withstand the rigours of live performance, the ESM26 features a sturdy steel grill, and a specially designed acoustic fabric protecting the compression driver. All housed in a stage ready wedge shaped cabinet the ESM26 is truly one of the most impressive monitoring solutions on the market.

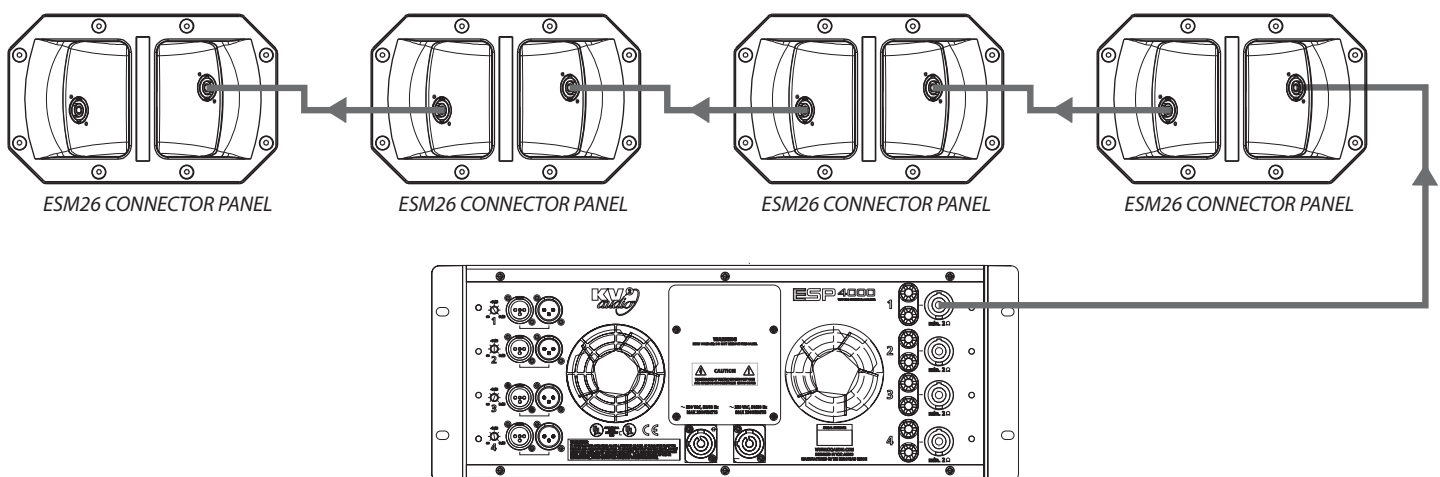
The ESM26 is dedicated as a floor monitoring system (half space area). It is designed according to KV2 Audio's philosophies and offers enhanced dynamic range, increased resolution and high output with exceptionally low distortion factors. The ESM26 has a balanced frequency response and exceptional phase characteristics achieved by its electronic and acoustic design.

The balanced phase characteristic is achieved by means of a unique dividing network containing a revolutionary passive delay line. The ESM26 also boasts electronic protection and monitors the maximum signal, thermal level. The woofer and tweeter are protected by a reverse thermal-circuit breaker (autoreset).

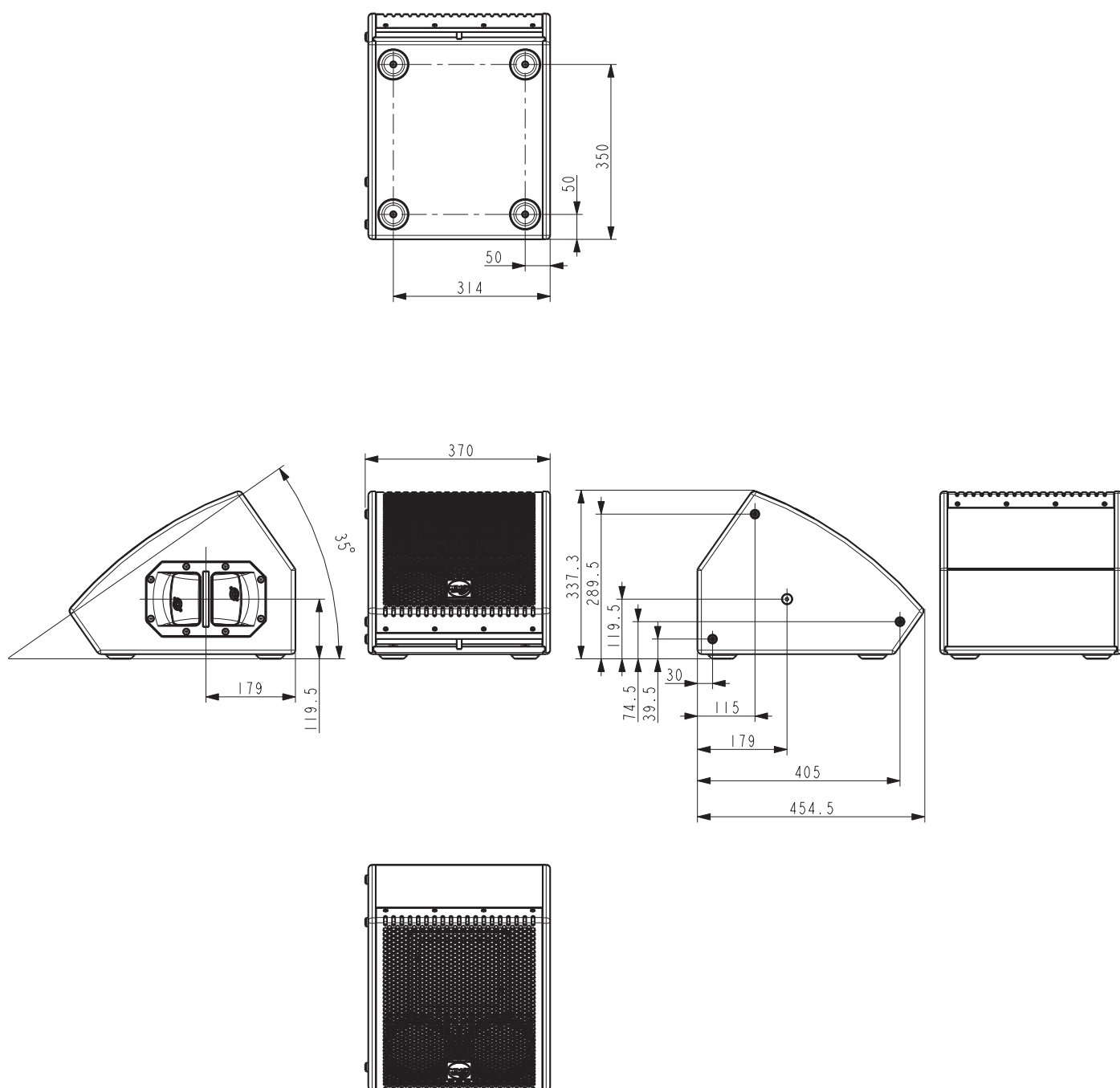
The ESM26 features a professional Baltic Birch construction with a wear resistant polymer coating and a specially designed handle for simplified carrying and handling. ESM26 is also available in any RAL colour.

Connection:

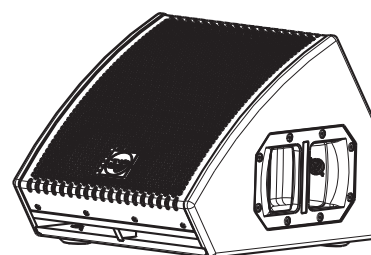
The ESM26 features two Speakon (NL4) connectors. The connectors are interconnected in parallel to allow the "daisy chaining" of additional ESM26's.



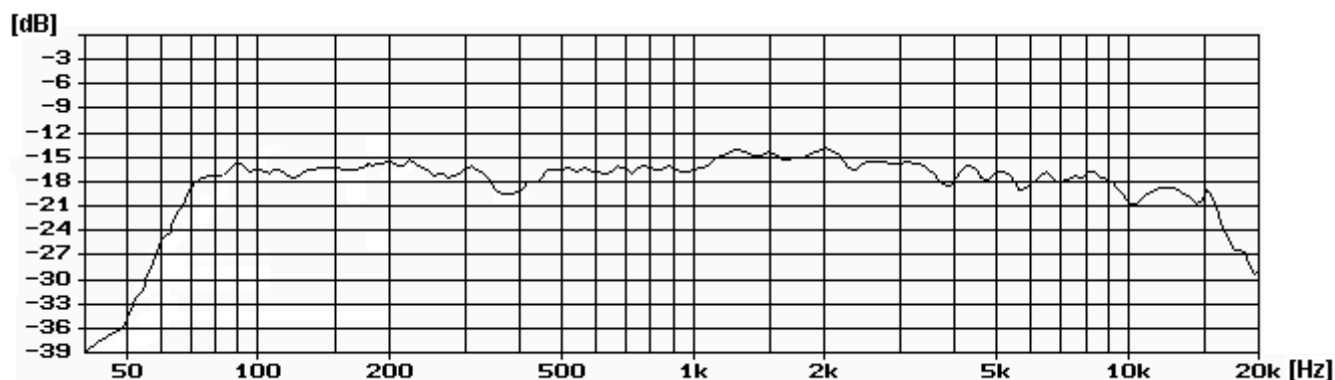
PARALLEL CONNECTION OF THE ESM26 (8Ω) - TOTAL IMPEDANCE 2Ω



MODEL NUMBER:
ESM26
PRODUCT CODE:
KVV 987 263



ESM26 Frequency response (half space)



ESM26 Specifications

System Acoustic Performance

Max SPL Long-term	123dB
Max SPL Peak	126dB
-3dB Response	70Hz ÷ 16kHz
Recommended Power	275W
Sensitivity	98dB
Impedance	8Ω
Crossover Point	2.5kHz

High Frequency Section

Acoustic Design	Horn Loaded
High Horn Coverage Horizontal / Vertical	100° x 100°
Throat Exit Diameter / Diaphragm Size	1" / 1.75"
Diaphragm Material	Nitride Titanium
Magnet Type	Neodymium

Low Frequency Section

Acoustic Design	Front Loaded, Bass Reflex
Number of Drivers	2
Woofer Size / Voice Coil Diameter / Design	6" / 1.75"
Magnet Type	Neodymium
Diaphragm Material	Epoxy Reinforced Cellulose

Speaker Input

Speaker Input	2x Neutrik Speakon®
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Features

RMS Limiter	autoreset
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Cabinet

Cabinet Material	Baltic birch
Handles	1
Color	"Orange peeled" Matt Black or any RAL

Physical Dimensions

Height	339.5mm
Width	373.5mm
Depth	455mm
Weight	15kg

ESM12L, ESM12R

Application:

- High quality floor monitoring applications
- Portable PA Systems for AV, speech and multimedia playback
- Peripheral support for other EX, ESD, ES, SL or VHD products
- High quality fixed installations with or without subwoofers
- Small to medium-sized Live Music applications



MODEL NUMBER: ESM12L	PRODUCT CODE: KVV 987 216
MODEL NUMBER: ESM12R	PRODUCT CODE: KVV 987 218

Description:

The ESM12 is a full-range low profile 2-way, passive 12" monitoring solution. The ESM12 features a revolutionary passive delay line which dramatically reduces feedback and the same 3" NVPD large format compression driver found in KV2 Audio's flagship VHD products. Designed to withstand the rigours of live performance the ESM12 features a sturdy steel grill and a specially designed acoustic fabric covering and protecting the compression driver against liquid.

All housed in a stage ready wedge shaped cabinet the ESM12L,R is truly one of the most impressive monitoring solutions on the market and is available in left and right configurations.

It is designed according to KV2 Audio's philosophies and offers enhanced dynamic range, increased resolution and high output with incredibly low distortion figures. The ESM12 has a very good balanced frequency response and exceptional phase characteristics achieved by its electronic and acoustic design.

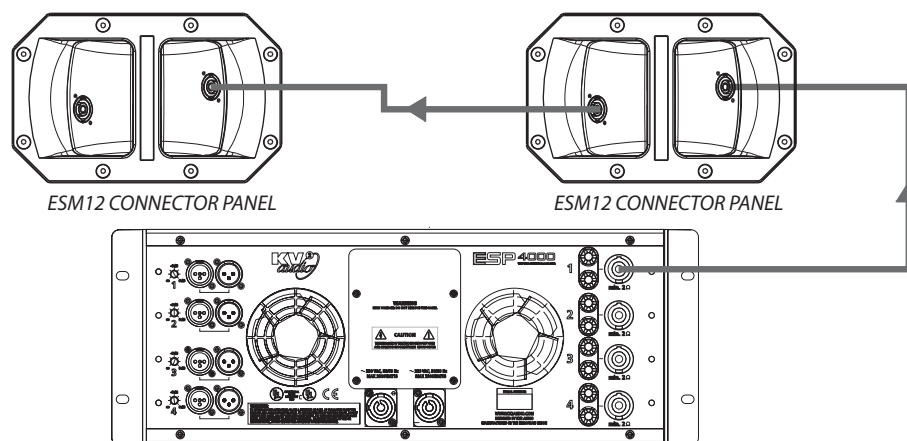
The low distortion figures are achieved using a 12" Super Acoustic Active Impedance Control loudspeaker with zero inductance, specifically developed by KV2 Audio. The balanced phase characteristic is achieved by means of a unique dividing network containing a revolutionary passive delay line. The ESM12 also boasts electronic protection and monitors the maximum signal level and tweeter signal. The 12" woofer is protected by a reverse thermal-circuit breaker (autoreset).

The ESM12L,R is professionally constructed from Baltic Birch wood, featuring a wear-resistant Polymer paint coating, purpose designed handles for simplified moving and carrying, complete with M10 suspension points on the top and bottom.

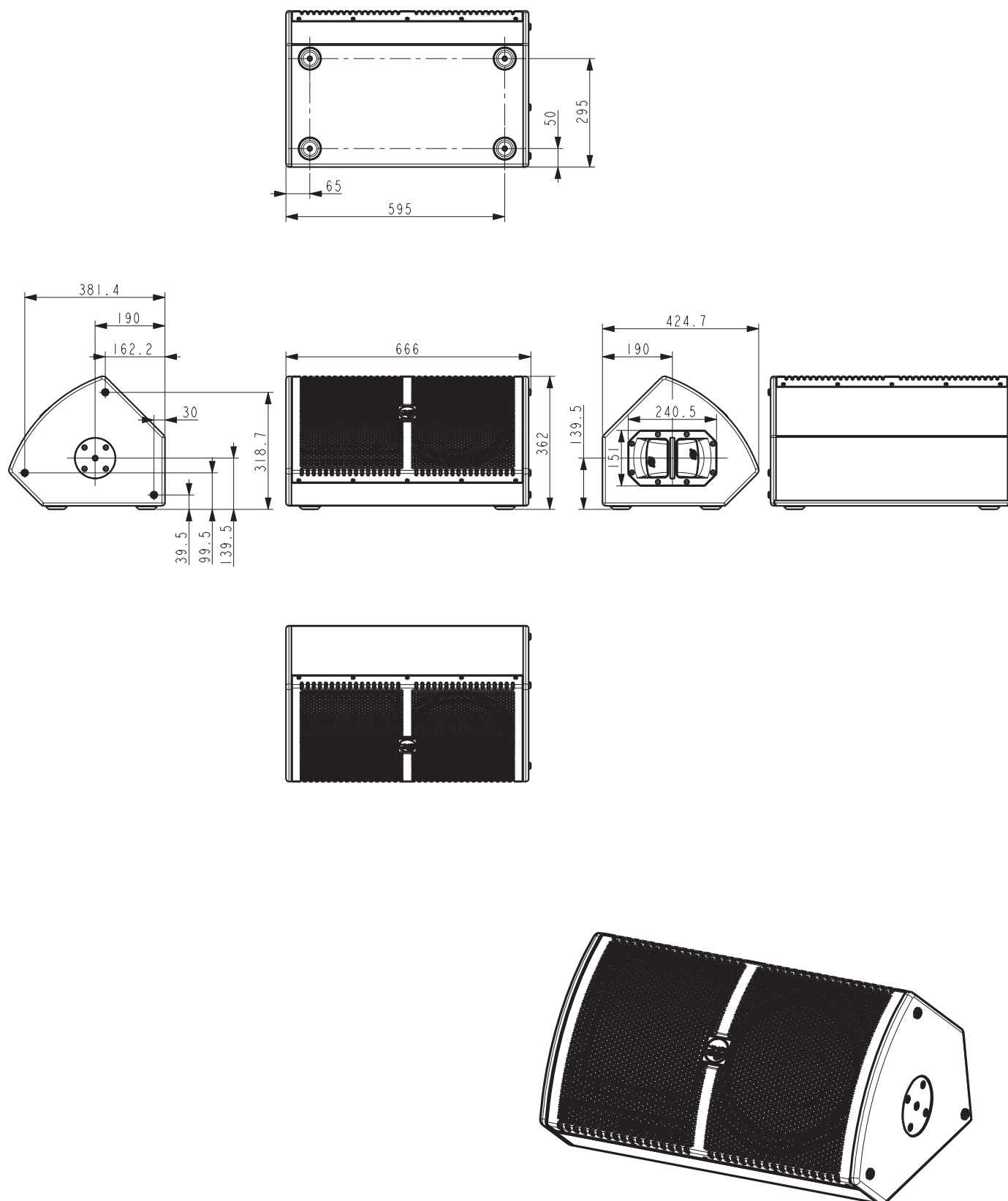
ESM12 is also available in any RAL colour (white RAL9003 on stock).

Connection:

The ESM12 features Speakon (NL4) connectors. The connectors are interconnected in parallel to allow the "daisy chaining" of additional ESM12's.



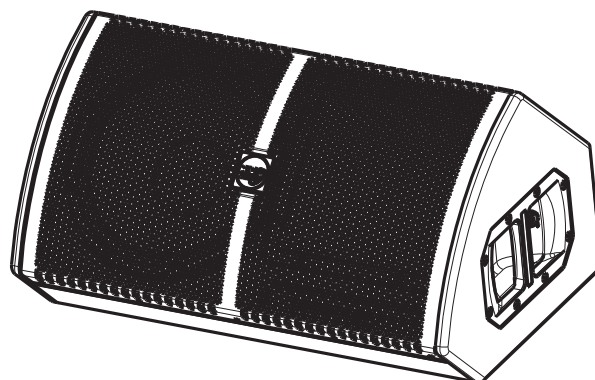
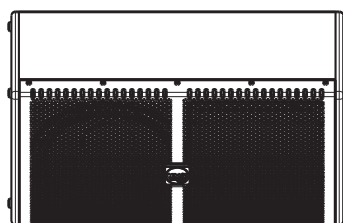
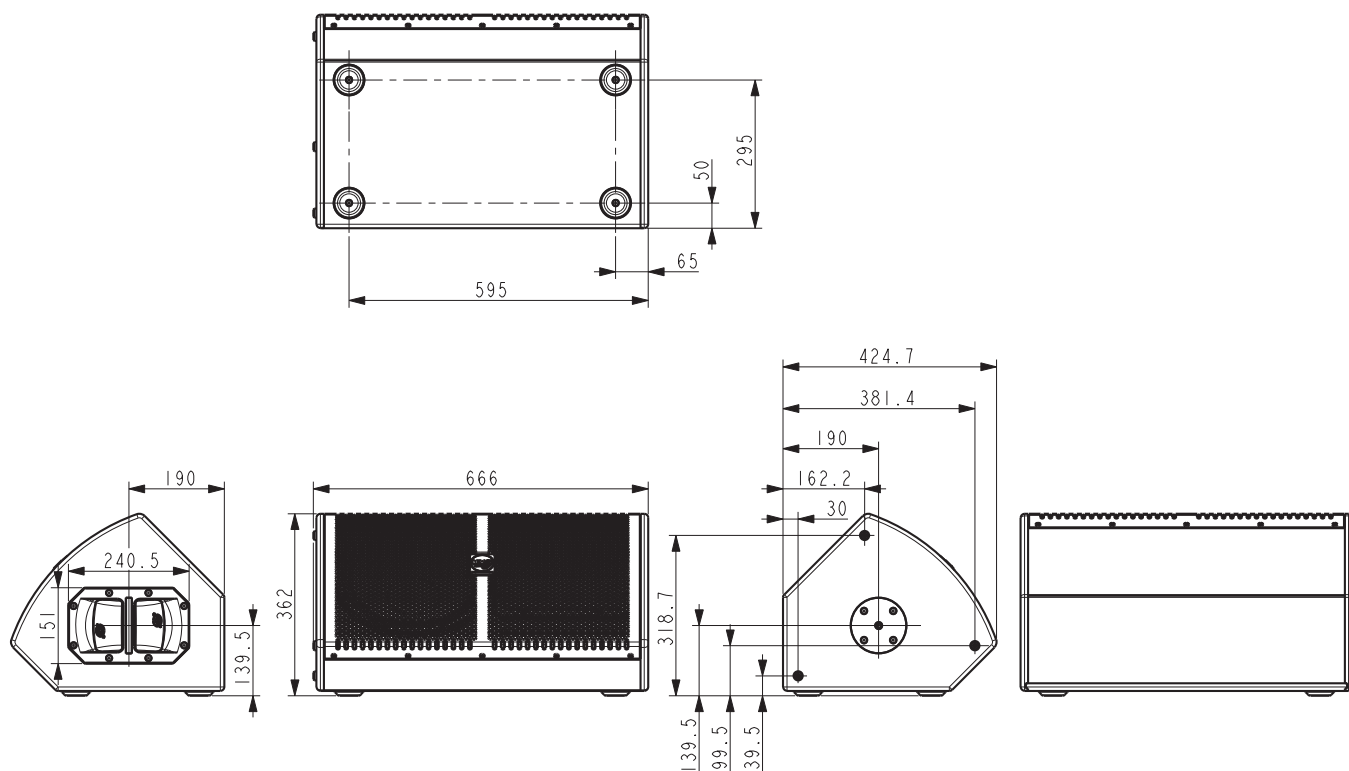
PARALLEL CONNECTION OF THE ESM12s (4Ω) - TOTAL IMPEDANCE 2Ω



MODEL NUMBER:
ESM12L

PRODUCT CODE:
KVV 987 216

ESM12R

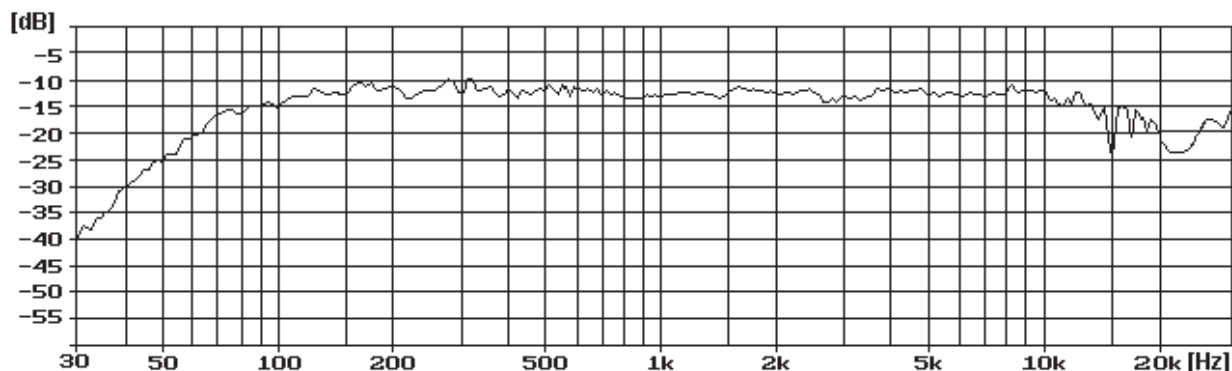


MODEL NUMBER:
ESM12R

PRODUCT CODE:
KVV 987 218

Drawing

ESM12 Frequency response



ESM12 Specifications

System Acoustic Performance

Max SPL Long-term	127dB
Max SPL Peak	130dB
-3dB Response	55Hz - 22kHz
Recommended Power	500W
Sensitivity	98dB
Impedance	4Ω
Crossover Point	1.2kHz

High Frequency Section

Acoustic Design	Horn Loaded
High Horn Coverage Horizontal / Vertical	40° x 80°
Rotatable Horn	YES
Throat Exit Diameter / Diaphragm Size	1" / 3"
Diaphragm Material	Nitride Titanium
Magnet Type	Neodymium
Protection	RMS Limiter

Low Frequency Section

Acoustic Design	Front Loaded, Bass Reflex
Woofer Size / Voice Coil Diameter / Design	12" / 2.5" / Trans Coil
Magnet Type	Neodymium
Diaphragm Material	Epoxy Reinforced Cellulose
Protection	Thermal breaker - autoreset

Speaker Input

Speaker Input	2x Neutrik Speakon®
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Cabinet

Cabinet Material	Baltic birch
Handles	1
Pole Mount	35mm
Color	"Orange peeled" Matt Black or any RAL

Physical Dimensions

Height	368mm (14.48")
Width	606mm (23.86")
Depth	368mm (14.48")
Weight	23kg (50.7lbs)

COVERS

PART NAME:
COVER ESM26
PART NUMBER:
KVV 987 281



PART NAME:
COVER ESM12L
PART NUMBER:
KVV 987 262



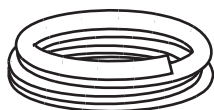
PART NAME:
COVER ESM12R
PART NUMBER:
KVV 987 261



SPEAKER CABLES

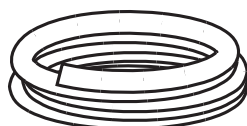
PART NAME:
**1m - round flexible speaker cable,
cross section 2 x 1.5mm**

PART NUMBER:
KVV 987 250

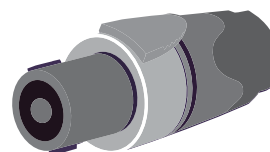


PART NAME:
**1m - round flexible speaker cable,
cross section 4 x 2.5mm**

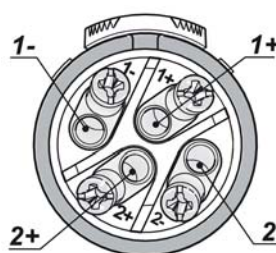
PART NUMBER:
KVV 987 251



PART NAME:
SPEAKON NL4
PART NUMBER:
KVV 987 240



ESD, Speakon NL4 wiring



positive pin
(1 +, 2 + parallel)

negative pin
(1 -, 2 - parallel)

RECOMMENDED SPEAKER CABLE LENGTHS

MINIMUM CROSS SECTION	LENGTH, IMPEDANCE 4Ω	LENGTH, IMPEDANCE 8Ω	LENGTH, IMPEDANCE 16Ω
1.5	8	15	30
2.5	15	30	60
2 x 2.5	20	40	90
4	25	50	100

WARRANTY:

Your ESM is covered against defects in material and workmanship. Refer to your supplier for more details.

SERVICE:

In the unlikely event that your ESM develops a problem, it must be returned to an authorised distributor, service centre or shipped directly to our factory. Because of the complexity of the design and the risk of electrical shock, all repairs must be attempted only by qualified technical personnel.

If the unit needs to be shipped back to the factory, it must be sent in its original carton. If improperly packed, the unit may be damaged.

To obtain service, contact your nearest KV2 Audio Service Centre, Distributor or Dealer.

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